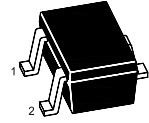


# MMBTSC4075W

## NPN Silicon Epitaxial Planar Transistor

For switching application.



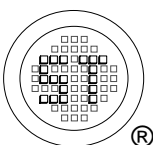
1.Base 2,Emitter 3,Collector  
SOT-23 Plastic Package

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	60	V
Collector Emitter Voltage	$V_{CEO}$	50	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	150	mA
Base Current	$I_B$	30	mA
Power Dissipation	$P_{tot}$	200	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit	
DC Current Gain at $V_{CE} = 6\text{ V}$ , $I_C = 2\text{ mA}$ Current Gain Group	O	$h_{FE}$	70	140	-
	Y	$h_{FE}$	120	240	-
	G	$h_{FE}$	200	400	-
	L	$h_{FE}$	350	700	-
Collector Base Cutoff Current at $V_{CB} = 60\text{ V}$	$I_{CBO}$	-	0.1	$\mu\text{A}$	
Emitter Base Cutoff Current at $V_{EB} = 5\text{ V}$	$I_{EBO}$	-	0.1	$\mu\text{A}$	
Collector Emitter Saturation Voltage at $I_C = 100\text{ mA}$ , $I_B = 10\text{ mA}$	$V_{CE(sat)}$	-	0.25	V	
Transition Frequency at $V_{CE} = 10\text{ V}$ , $I_C = 1\text{ mA}$	$f_T$	80	-	MHz	
Collector Output Capacitance at $V_{CB} = 10\text{ V}$ , $f = 1\text{ MHz}$	$C_{ob}$	-	3.5	pF	

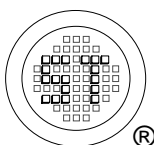
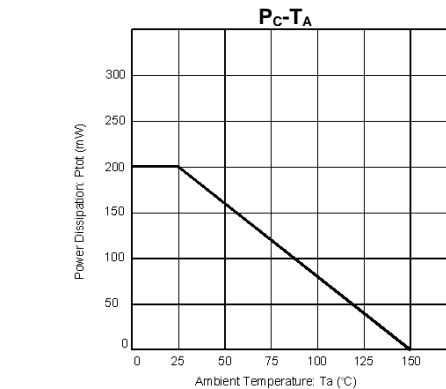
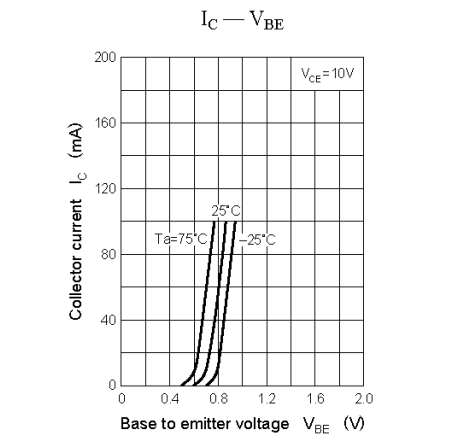
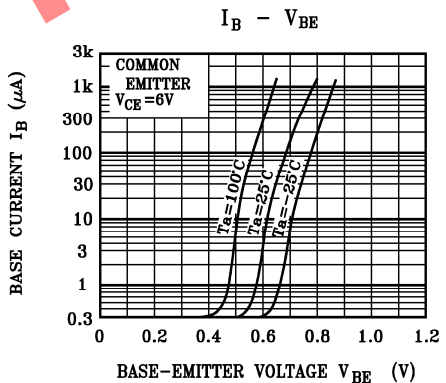
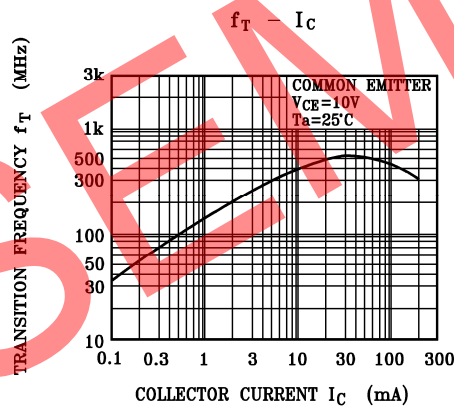
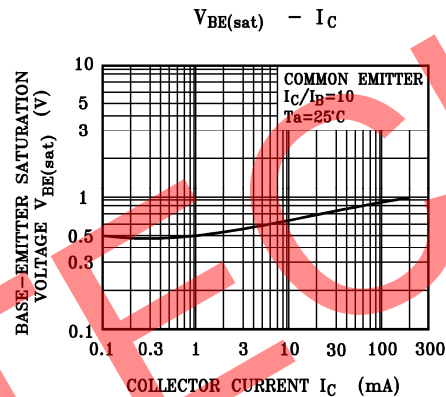
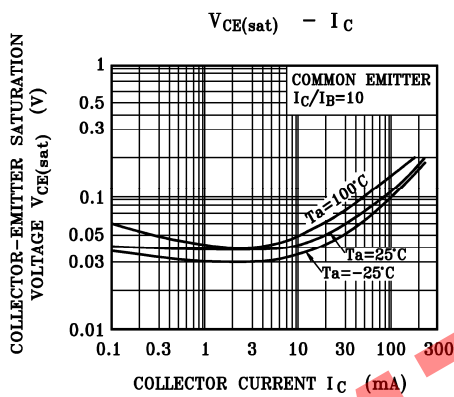
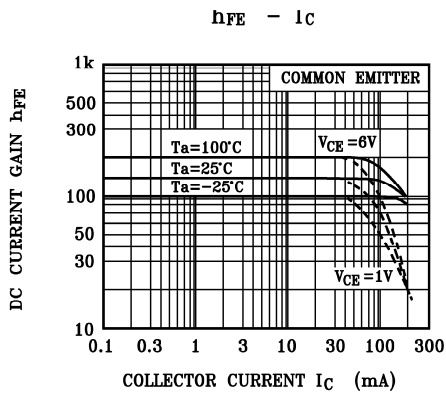
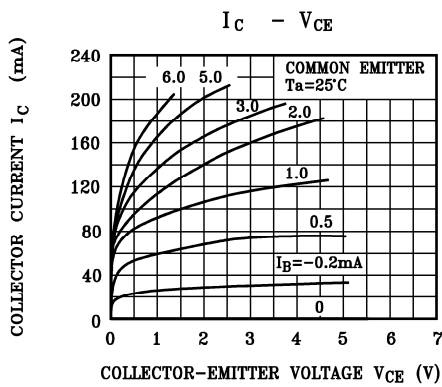


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Dated : 27/05/2010 Rev:01

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